Certificate

Mr. Abdelrahman Mohamed Abdou Mostafa, born on February 11th, 1999, in Egypt, completed a six-month internship in our company in the time 06.03.2023 until 21.07.2023.

Mr. Mostafa worked full-time (35 h/week) in our production.

He performed the following activities:

He has worked in the sample preparation project that consists in the implementation of the Niryo Ned2 robot with the Fluxana library to perform a powder dosage task. By utilizing ROS (Robotic Operating System) and Moveit (Motion Planning Framework) that are integrated in the Fluxana cobot library.

The goal of this project is:
- Acquired knowledge about how to integrate Niryo Ned2 with ROS and Moveit
- Expansion of Fluxana library functions to comport Niryo Ned2 robot
- GUI for a simple powder dosage task

The following skills were necessary:
- Basic Linux: navigation of Linux filesystem; creation of files; how to manipulate and edit a file, execution and permissions of files.
- Object-Oriented Programming.
- Basic Physics & Math knowledge: kinematics, Probability and linear algebra.
- Basic electronics: Electronic Components, digital logic, motors (e.g. stepper motors) and sensors.

Mr. Mostafa worked carefully and dedicated. He mastered all tasks to our satisfaction. Facing challenges Mr. Mostafa always worked target-oriented and methodically. His personal behavior was exemplary.

We now continue to accompany Mr. Mostafa with support in writing his bachelor thesis.

Bedburg-Hau,

Pauline Schramm
Human Resources